

if the public wanted it, and if, instead of notification, we concentrated on education and efficient propaganda, these would be much more effective in the long run.

Dr. Mascal's remarks regarding the probability of non-specific urethritis being gonococcal were interesting, but Dr. Erskine did not think that the suggestion applied in every case. Some cases persisted for a long time and did not respond to sulphonamide treatment. Diagnosis was not only a matter of cultures; in cases in which gonococci were not found on the film, the general appearance of the film was often unlike that seen in gonorrhoea. He agreed that *Trichomonas vaginalis* was probably an associated factor in some cases; even though there was a failure to find *T. vaginalis* in the male patient, it was sometimes found in his consort.

Col. King had attacked him for his remarks about jaundice. They recorded impressions in which he believed, and as such he had presented them to the meeting, but unfortunately he had not had the time or assistance necessary to carry out controlled experiments. What he had taken into account was that some patients had not had any treatment for jaundice and had taken longer to get better than did those who had received active corrective treatment. With regard to Col. King's experience of the reduced incidence of jaundice since the introduction of the Netley experiment, he submitted that other centres had experienced just the same improvement without the battery of syringes and trained personnel. He approved of the experiments to improve technique, but he felt that the results claimed ought not to be accepted until the evidence fully supported their justification.

## ACQUIRED SYPHILIS IN CHILDREN

### THREE PROBABLE CASES

By R. C. WOFINDEN, M.D., D.P.H.

*Venereal Diseases Medical Officer, County Borough of Rotherham, Yorkshire*

The majority of cases of acquired syphilis in infants and children reported in the literature are those in which the mother is non-syphilitic, the infection having been derived from some third person. Indeed, the requirements put forward by Smith for the diagnosis of acquired syphilis in infancy are as under.

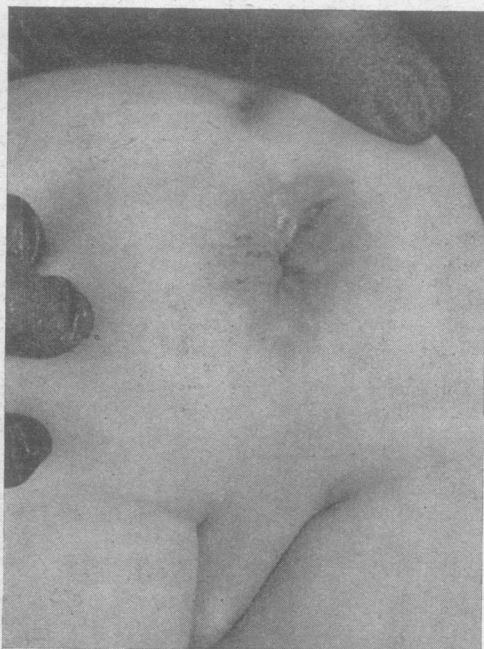


Fig. 1. Healing condylomata. The patient had been treated with acetarsol, grain  $\frac{1}{2}$  twice daily for 14 days.

(1) That the mother has been non-syphilitic during her pregnancy and has never received any anti-syphilitic therapy which might have altered her serological reactions.

(2) That the child has been known to be clinically and serologically negative previously.

Neither of these criteria is fulfilled in the following three cases, but on the balance of evidence they would appear to be cases of syphilis acquired in childhood.

#### Case 1

On 3rd October 1944, a woman aged 21 years attended the clinic in company with her son aged 2 years 11 months and her daughter aged 1 year. The mother stated that her husband, who was in the Army, had been receiving treatment with injections for venereal disease. Six weeks prior to her visit she had noticed a vulval sore, had suffered from a sore throat and had begun also to lose her hair. The vulval sore and the sore throat had cleared up. The little boy had "a sore bottom" of one month's duration and "his hair was going thin". Extra-marital and premarital intercourse was denied. The last coitus was with her husband in May 1944 and coitus had taken place at intervals of

## ACQUIRED SYPHILIS IN CHILDREN

about three months prior to that date. Examination of the mother revealed recent soft scarring just below the fourchette, also a diffuse alopecia. There was no rash, no throat lesion and no adenitis. Serological reactions showed Wassermann ++ Kahn +++.

The boy had always slept in the mother's bed, even when the father came home on leave, but the baby girl slept in her own cot.

The boy looked ill. There were typical condylomata lata round the anus. (See Fig. 1.) Dark-ground examination showed *Spirochaeta pallida*. There was a generalized enlargement of the lymph glands, also a diffuse alopecia. The Wassermann and Kahn reactions were both strongly positive.

The girl showed no clinical signs of syphilis and both Wassermann and Kahn reactions were negative.

Subsequent enquiry elicited the information that the father had been admitted to hospital on 26th October 1943, suffering from early syphilis: prepuce irretractable, indurated sore at coronal sulcus and left inguinal adenitis. Dark-ground examination showed *S. pallida* ++; Wassermann reaction ++. Unfortunately no serological tests had been carried out on the mother's blood during her two pregnancies.

The most likely explanation of events seems to be as follows. The mother and son were probably both in the secondary stage of syphilis when seen at their first visit. The recent scarring below the fourchette was probably due to a healed primary lesion. But for the history of the father, the comparatively trivial signs in the mother would have been disregarded. There was no history of a primary sore in the boy and the only evidence of scarring was on his left knee, but this was attributed by the mother to trauma. The boy would seem nevertheless to have been in the secondary stage on his first visit. It is well known that primary lesions are frequently unrecognizable in infants with acquired syphilis (Creswell, Seech and Murray).

Cases in which acquired syphilis in a parent is passed on to a child already born do occur. It seems probable that this is such a case, in view of the recent onset in the mother and father and the negative findings in the younger child. The fact that the younger child showed no clinical or serological evidence of syphilis is contributory evidence only, since it is well recognized that the birth of apparently normal children may alternate with congenitally syphilitic children in the same family.

However, for the boy to have been a case of congenital syphilis must have meant that the mother was suffering from syphilis 3 years ago, at the age of 18 years, and it would seem reasonable to suppose that if at this early age she had acquired a recent infection, the father would have contracted his primary chancre 3 years ago and not one year ago. Another possibility presents itself: that the woman was in fact suffering from syphilis at the time of the boy's conception but was non-infectious to the husband, and that she had a relapse some time in 1943 and then gave the husband primary syphilis. If in fact this had happened, the chances that the baby girl (born in October 1943) would be a congenital syphilitic must have been extremely great, and yet she showed no evidence of infection.

The most likely explanation of the events would therefore seem to be that the husband contracted extra-marital syphilis in October 1943 and passed it on to his wife, who later showed signs of secondary syphilis. Whether the boy was infected by his father or his mother and the mode of infection are not known.

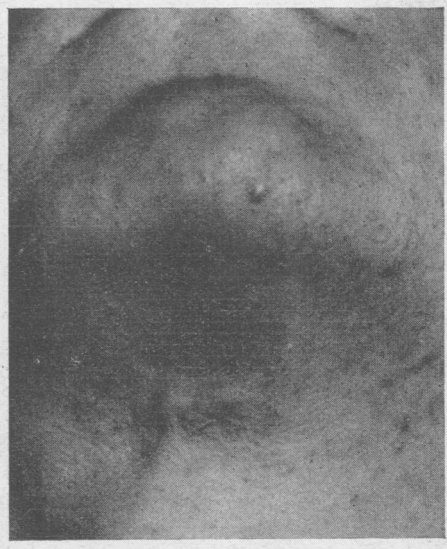


Fig. 2. Scarring of the neck at the age of 17 years resultant from a syphilitic lesion at the age of 7 years.

### Case 2

The following case appears also on the balance of evidence to be one of syphilis acquired in childhood, although there is no evidence to show how the disease was acquired.

A boy 7 years old was referred to the clinic in June 1935 with an abscess in the neck, which had developed slowly during the previous 6 months. One month prior to his first attendance "inflammation" had developed in one of his eyes. His blood Wassermann reaction was positive and the diagnosis of gumma in the neck was made. He was treated with sulpharsphenamine and the "abscess" rapidly disappeared, as did the inflammatory eye condition. Throughout the next 2 years, during which time he attended the clinic regularly, he received treatment and the blood Wassermann reverted to negative, the Kahn reaction being ++. By 1940 the Wassermann reaction was negative and the Kahn weakly positive; vision was 6/12, 6/12, there was no evidence of corneal scarring and the fundi were normal. By 1941 both Wassermann and Kahn reactions were negative and in 1942 he joined the Royal Air Force and received no further anti-syphilitic treatment. (See Fig. 2.) In 1944 he was invalidated out for attacks of *petit mal*. (Electroencephalogram normal, x-ray film of skull normal, Wassermann reaction negative.) In 1945 his blood Wassermann and Kahn reactions were still negative; examination of the cerebrospinal fluid showed a negative Wassermann reaction, colloidal gold reaction 0011000000, slight excess of globulin, and total protein 0.03 per cent.

The family was investigated in 1935. Neither mother nor father gave evidence of a syphilitic history and neither showed clinical signs of syphilis. Their Wassermann reactions were negative. The other 5 children in the family, girls aged 16 and 14, twins (girl and boy) aged 12 and a boy aged 2 years, showed no evidence of congenital syphilis and their Wassermann reactions were all negative. All these children have been examined at yearly intervals since 1940 and their serological reactions have remained negative.

When the mother's blood was examined in 1940 it showed a negative Wassermann and weakly positive Kahn reaction, but the latter had reverted to negative by 1941 and was negative when re-examined in 1944.

In view of the absence of clinical or serological evidence of syphilis in any of the other members of the family, it seems highly probable that this boy's illness was acquired syphilis, although evidence of the mode of infection is lacking.

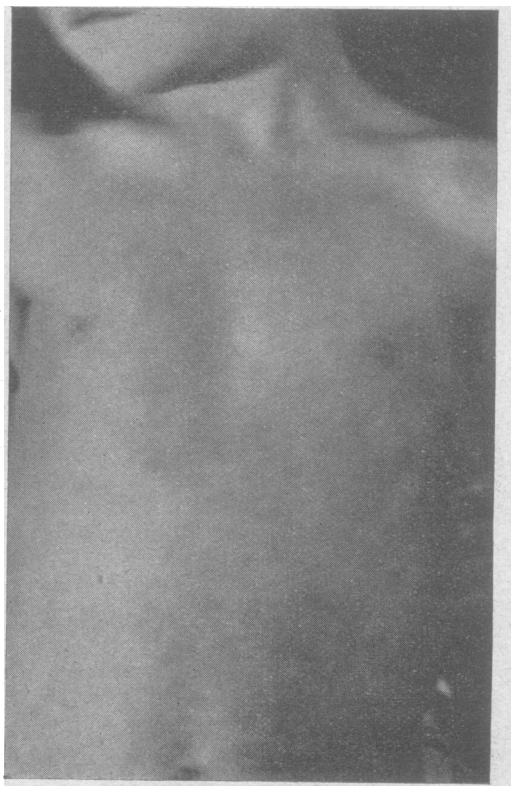


Fig. 3. Secondary rash in girl aged 6 years.

### Case 3

In November 1944 a man aged 22 years attended the clinic with a healing primary chancre and a fine widespread macular rash. The chancre was of 3 months' duration and the rash had been present for 2 weeks. The blood Wassermann and Kahn reactions were both strongly positive. Enquiry elicited the information that he was cohabiting with a woman whose husband was abroad, and that they both lived with the woman's married sister and husband. The latter had one child, a girl aged 6 years. The patient's partner, aged 26 years, was persuaded to attend the clinic and on examination was found to have a healing primary sore near the vulva, a mucous patch on the left anterior pillar of the fauces and pronounced occipital and posterior cervical adenitis. The blood Wassermann and Kahn reactions were strongly positive.

## ANNOTATIONS

In February 1945 the female patient brought the little girl, aged 6 years, to the clinic with the story that for the last 2 months the child had had a rash on the chest and back and swellings in the neck. A few weeks previously she had been treated for "mumps". The woman suspected that the child might have acquired syphilis from her, since they were in such close proximity in the home; they slept together, on several occasions the male patient had bathed the child and it was not uncommon for the child to use her aunt's towel. A few months previously the aunt had pulled out two of the child's teeth with her fingers; the gums did not heal for three weeks. On examination the child had a diffuse morbilliform rash on the chest, abdomen and back (see Fig. 3); there was also enlargement of the posterior cervical and tonsillar lymph glands, with mucous patches on the fauces and a generalized thinning of the hair. Her blood Wassermann and Kahn reactions were both strongly positive. The child's parents were induced to attend the clinic and showed no evidence of syphilis. The blood Wasserman and Kahn reactions were negative in both cases.

There seems to be no doubt in this last case that the child had acquired syphilis either from her aunt or from her aunt's male partner. Again there is no evidence of a primary lesion in the child, although the tooth-pulling episode might be significant.

In tracing contacts of venereal patients it is the sexual partner who is usually sought. This case does seem to raise the question of the desirability and practicability of investigating households in which highly infectious cases are known to reside. In these days of overcrowding and relaxed hygienic standards, there may be a considerable number of cases of "syphilis innocens" going unnoticed.

### REFERENCES

- Creswell, G. W., Seech, Elizabeth, and Murray, W. L. (1943) *Amer. J. Dis. Child.*, 66, 611.  
Smith, R. F., Jun. (1939) *Amer. J. Syph.*, 23, 165.

## ANNOTATIONS

### PODOPHYLLIN TREATMENT OF GENITAL WARTS

Condylomata acuminata, auto-inoculable and infectious benign tumours, occur usually in the genital and anal regions, rarely between the toes and in the region of the umbilicus; inoculation experiments have shown them to be due to a virus. The lesions, usually multiple, may be small filiform projections or large cauliflower-like growths and are sessile or pedunculated. When situated in moist areas they are soft and friable and in dry areas are firmer in consistence. The lesions must not be confused with condylomata lata, which are of syphilitic origin.

#### Earlier methods of treatment

Many types of treatment (galvano-cautery, diathermy, ligature, trichloroacetic acid, phenol, x-ray and circumcision) have been recommended and in 1942 Kaplan treated 20 cases with 25 per cent podophyllin in mineral oil. Rapid cures were obtained in all cases and there were no complications or toxic manifestations. Culp, Magid and Kaplan subsequently treated 100 males (all but 7 as out-patients), the lesions being penile in 97 cases, anal in 2 and perineal in one. Of the penile cases 62 were treated with 25 per cent podophyllin in mineral oil and 35 with a paste prepared by mixing the crude podophyllin powder with water "until the desired consistency was obtained". In the first group 56 were cured with one application, 5 with 2 and 1 with 3; most of the early failures occurred when the lesions were intrameatal. A cure was effected in the majority of the cases in 2-3 days; in one case it was delayed for 16 days. Six cases developed a mild balanitis and in 3 of these there was an inflammatory phimosis requiring dorsal incision or circumcision. Excellent results were obtained also in the second group, only 2 patients requiring a second application of the aqueous paste, but here again in 6 cases a balanitis developed which was usually associated with an inflammatory phimosis. Similar good results were obtained with anal and perineal lesions. The authors state that a complete follow-up was impossible but report 2 recurrences, one month and 2 months after apparent cure.